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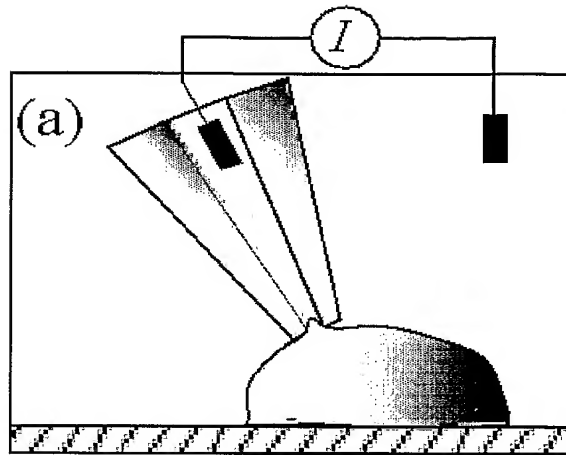


FIG. 1A

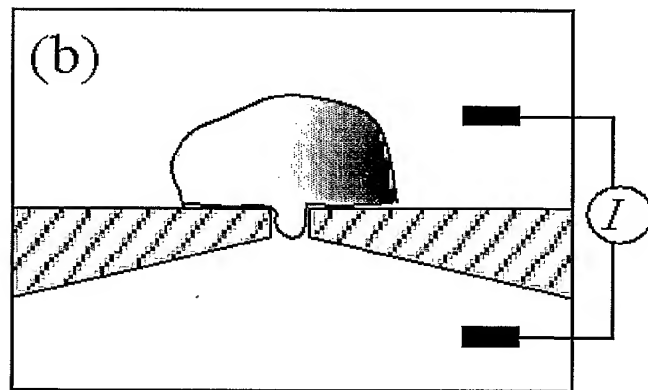
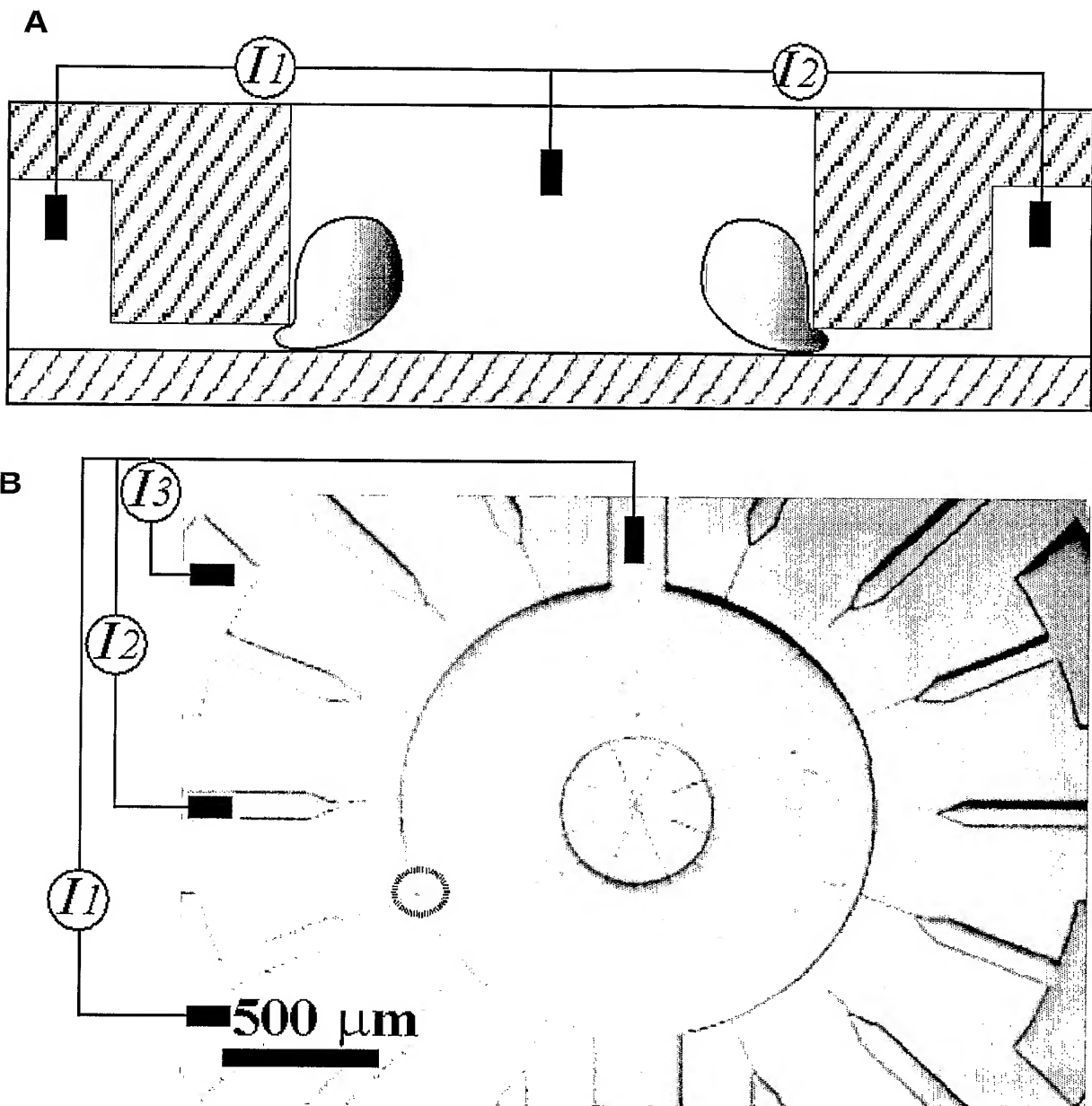
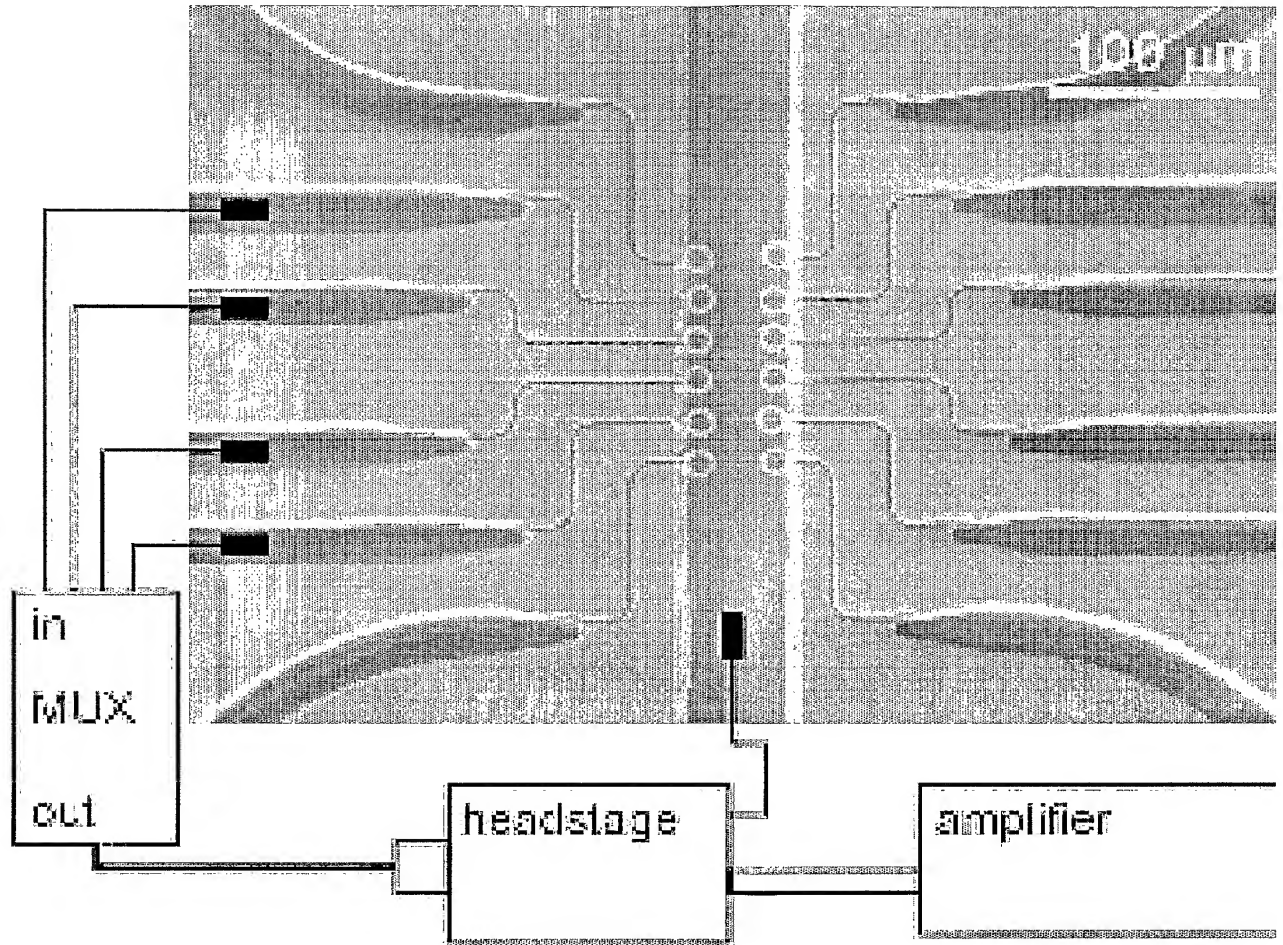


FIG. 1B

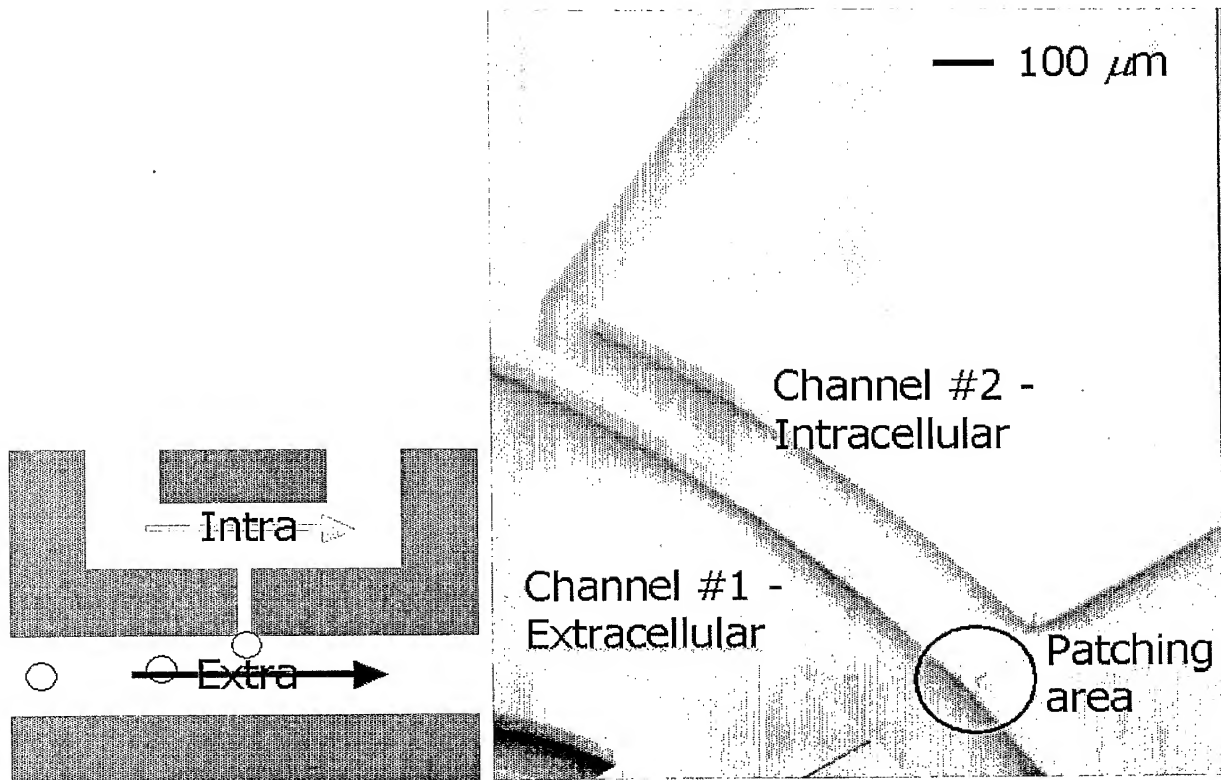
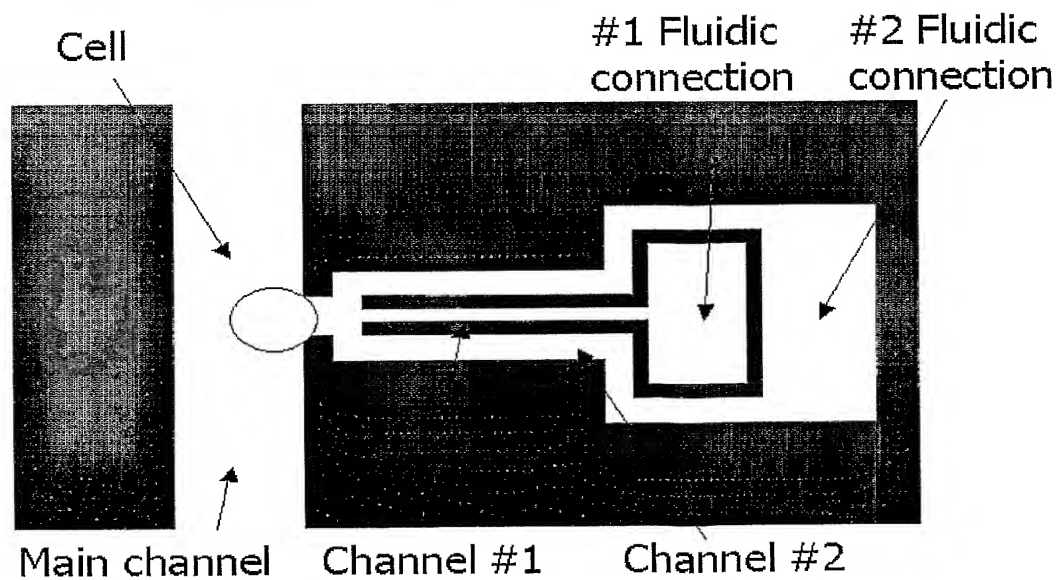
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FIG. 2A & B

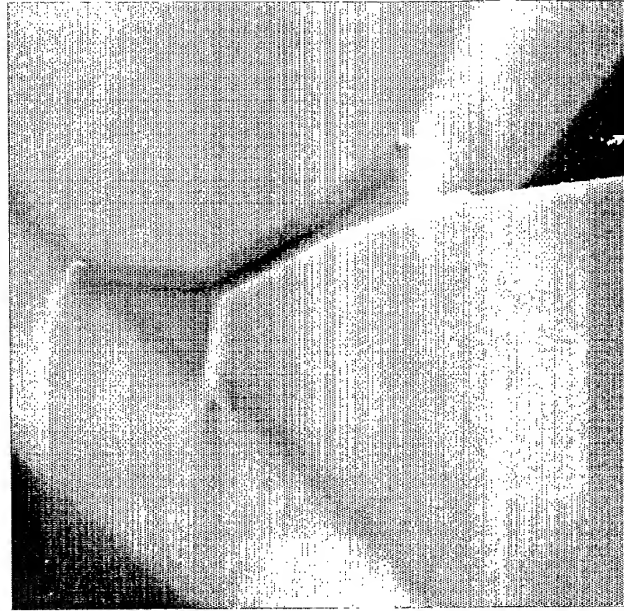
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*FIG. 2C*

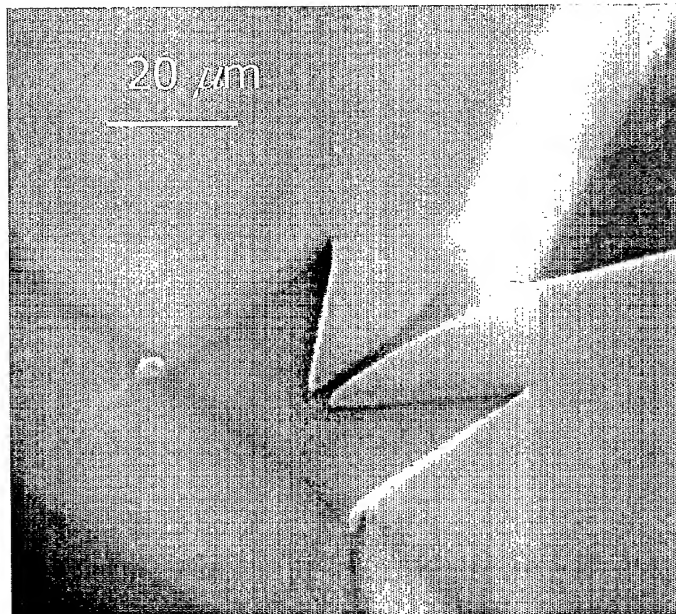
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**FIG. 3****FIG. 4**

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**FIG. 5A**



**FIG. 5B**

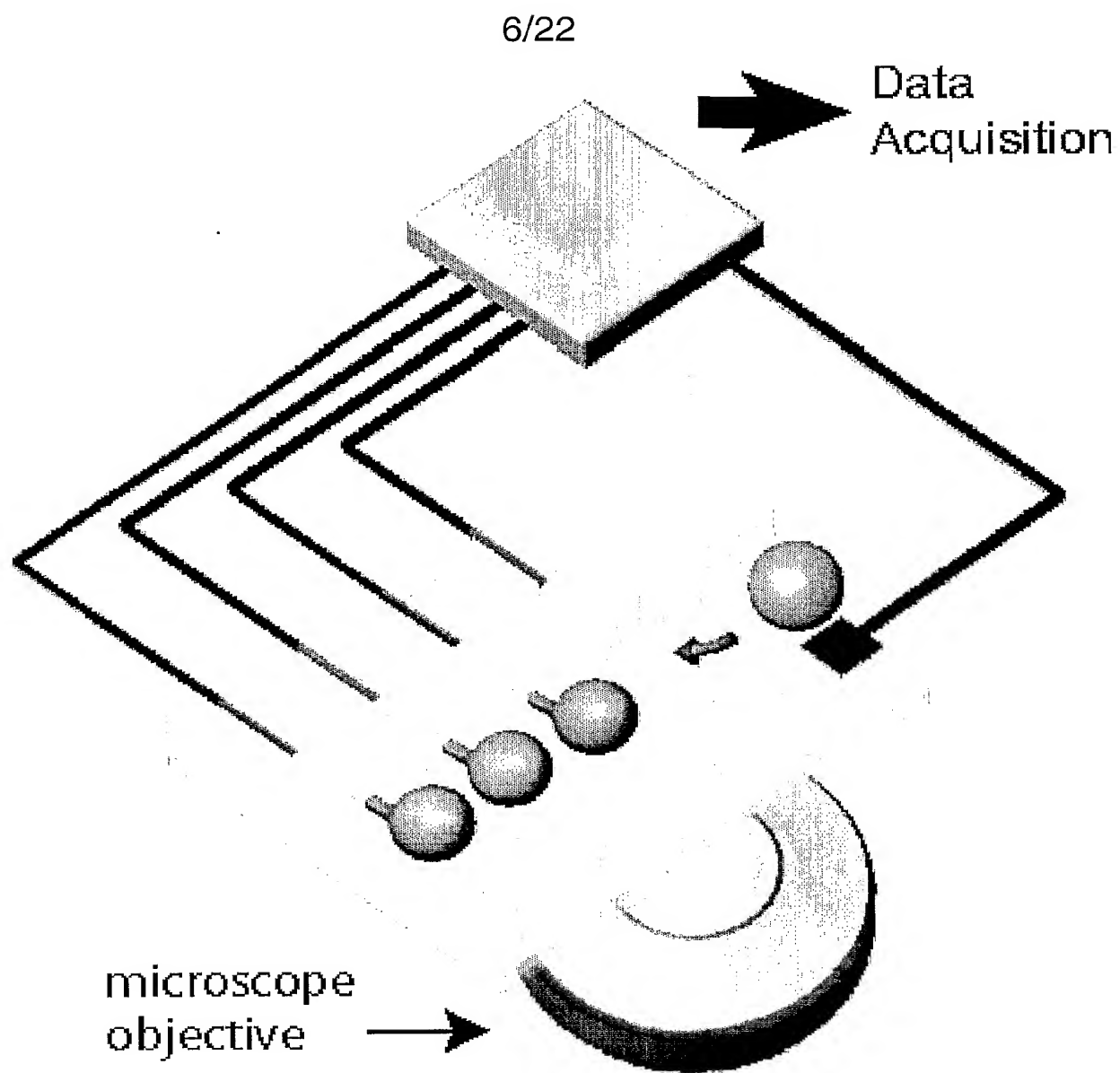


FIG. 6A

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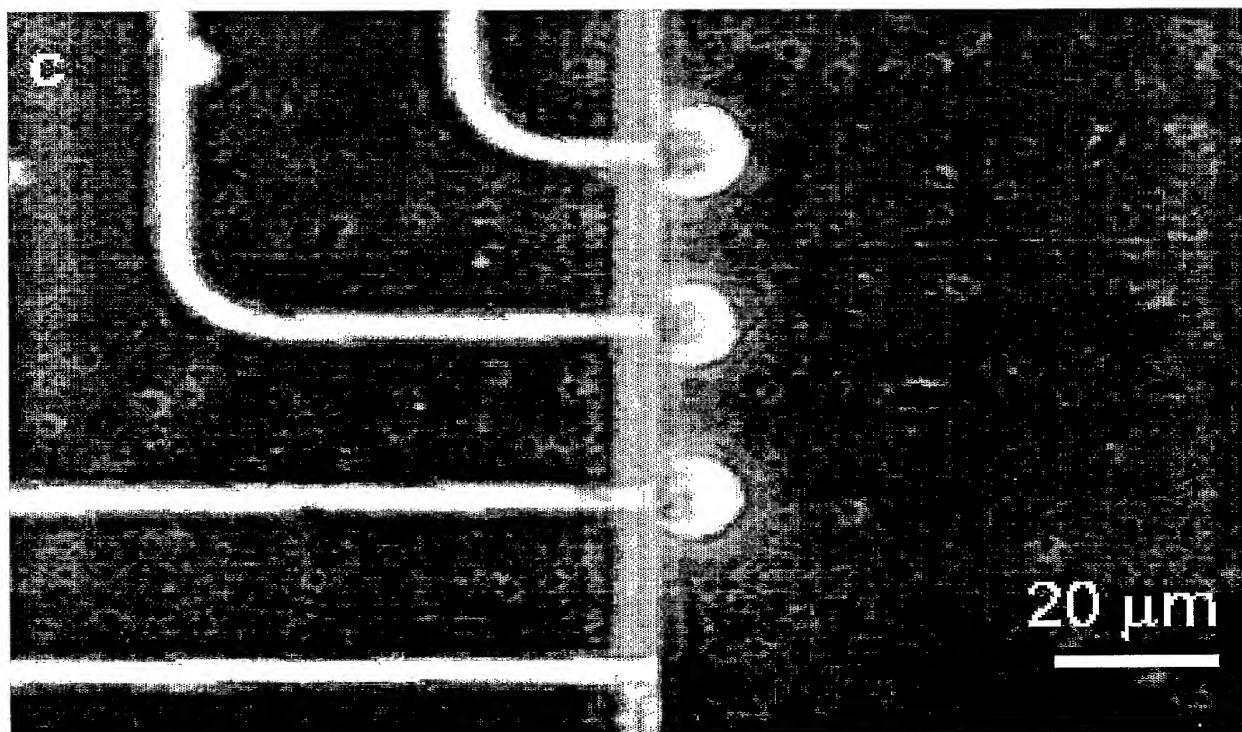
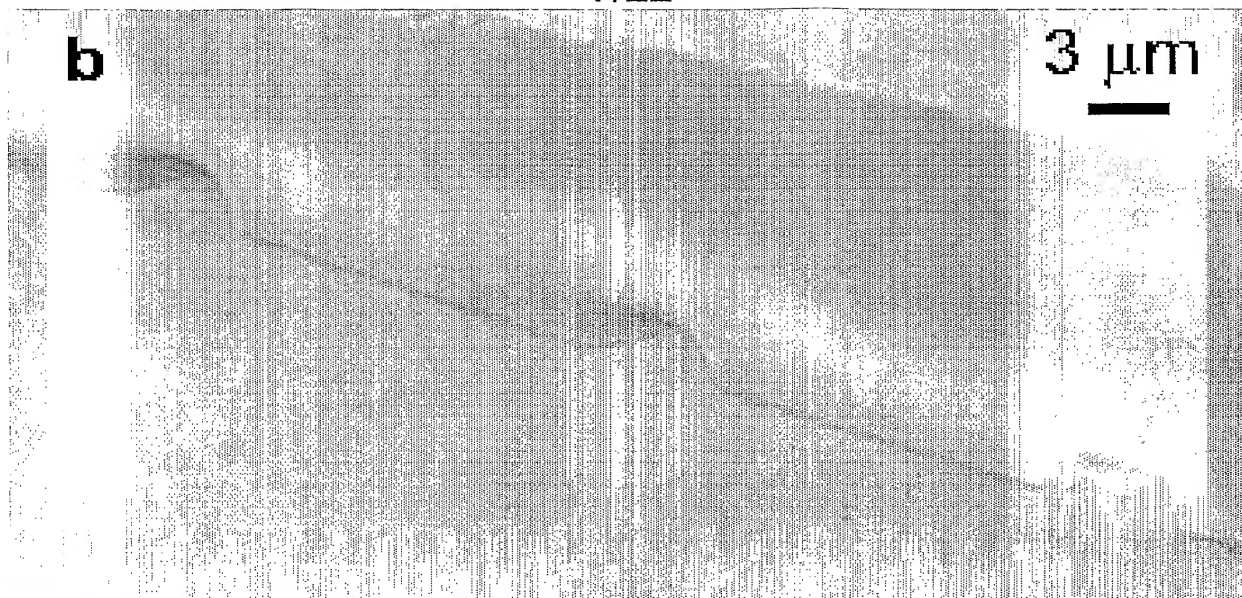
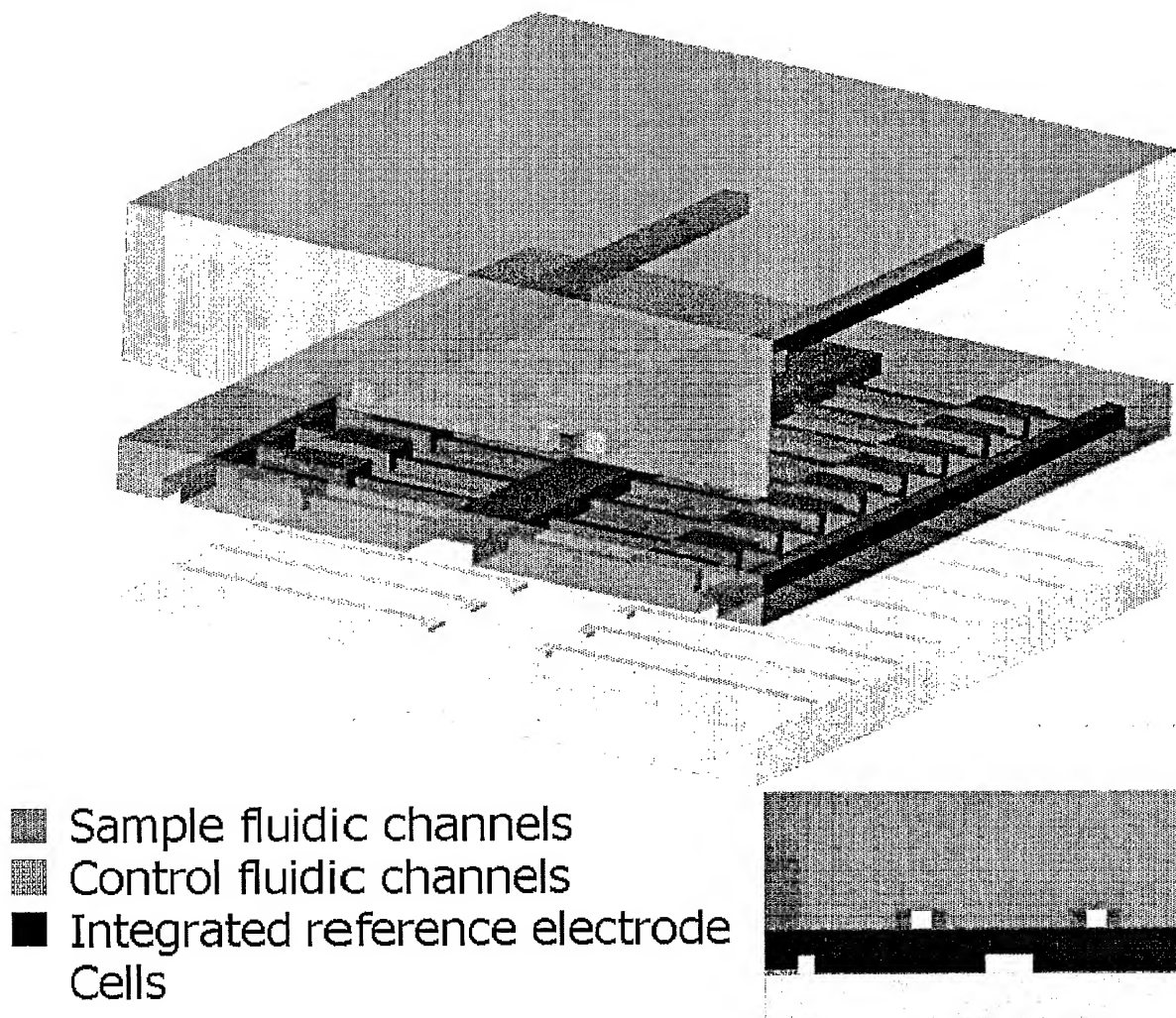


FIG. 6B&C

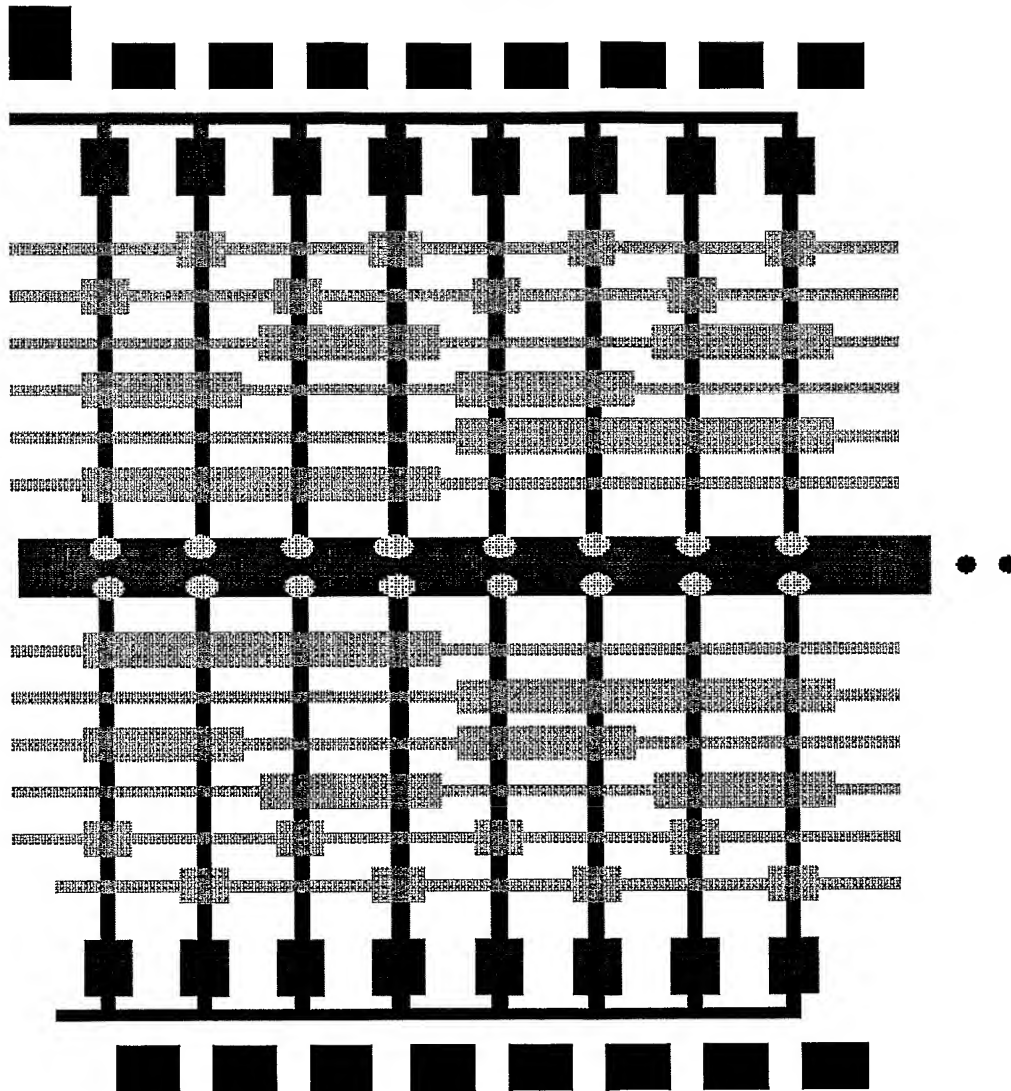


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**FIGS. 7A**



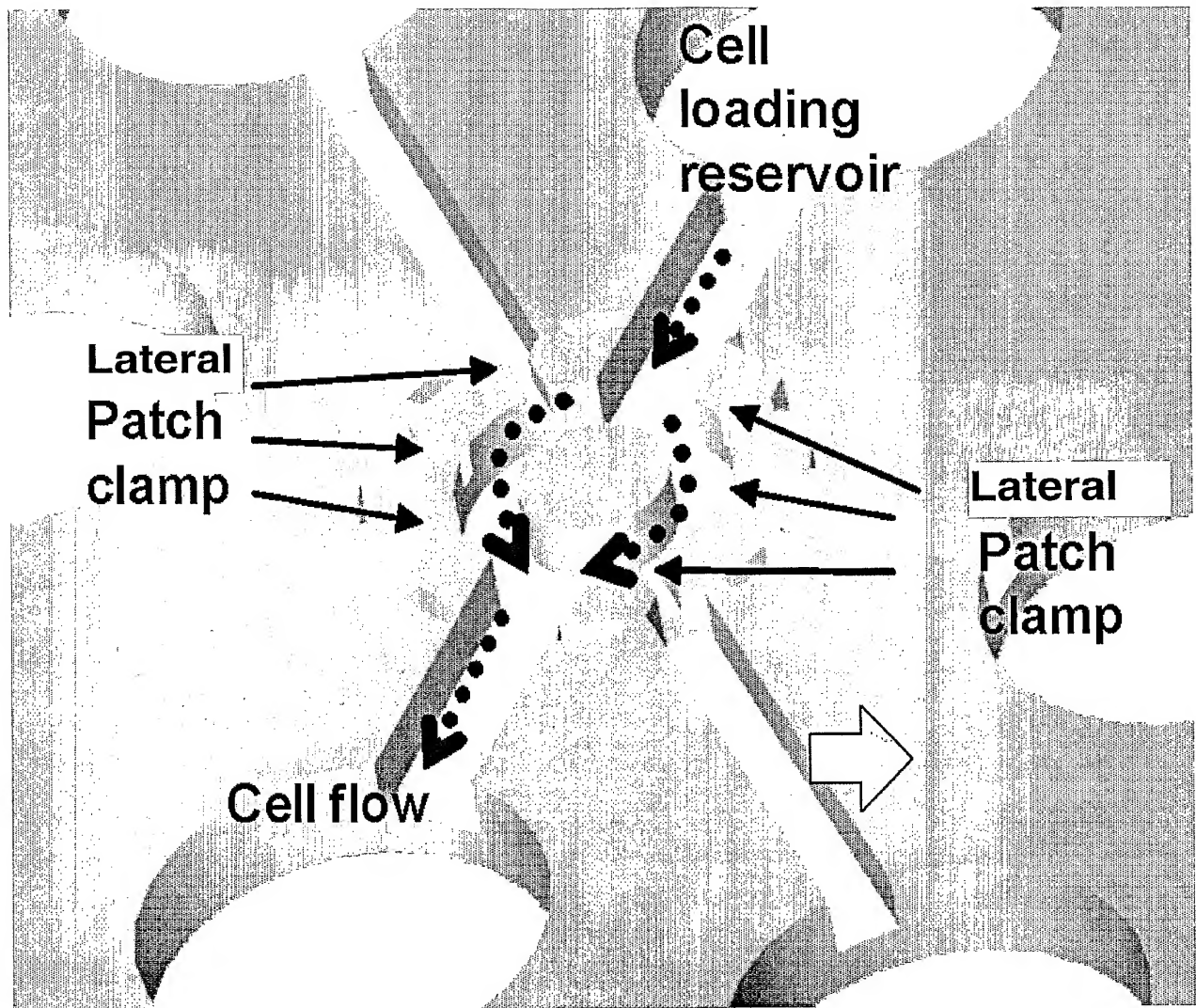
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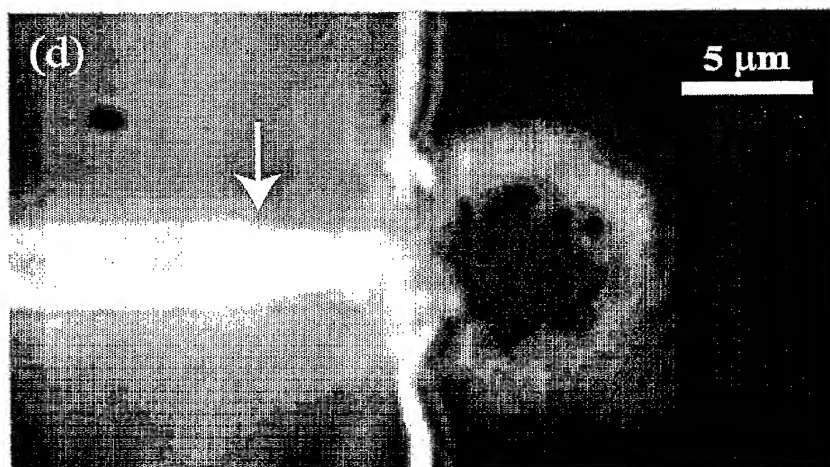
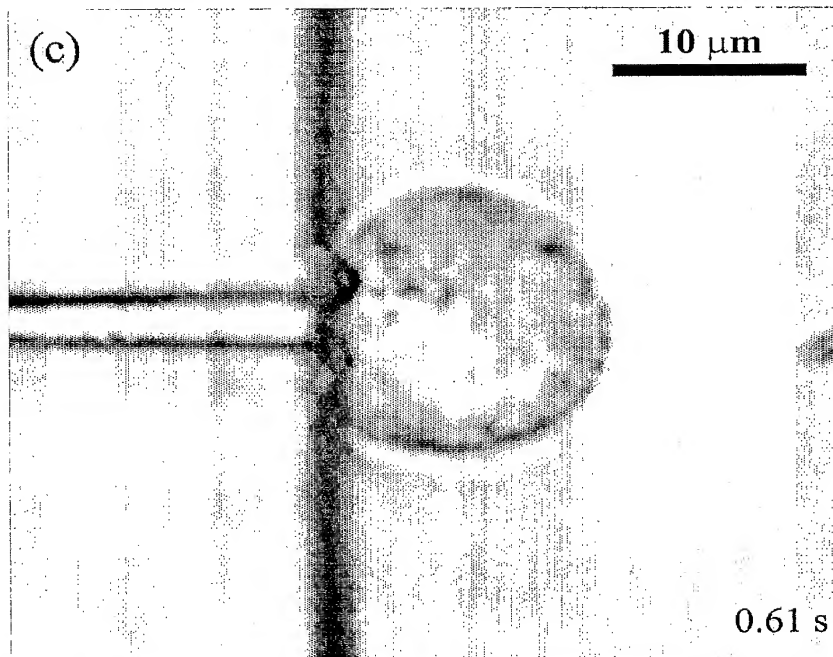
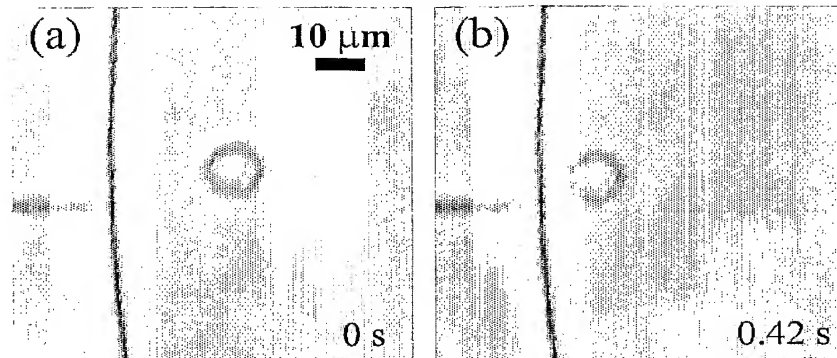
- Sample fluidic channels
- Control fluidic channels
- Integrated reference electrode Cells

*FIGS. 7B*

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**FIG. 8**

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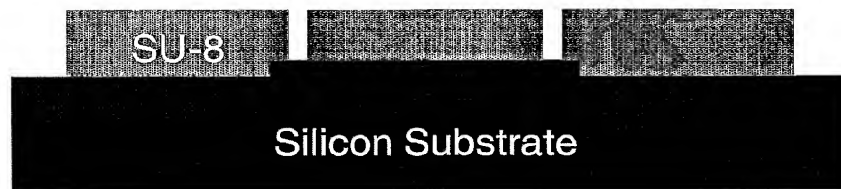
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FIG. 9

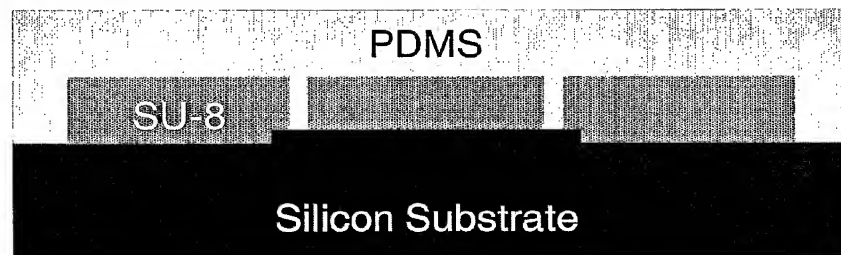
(a)



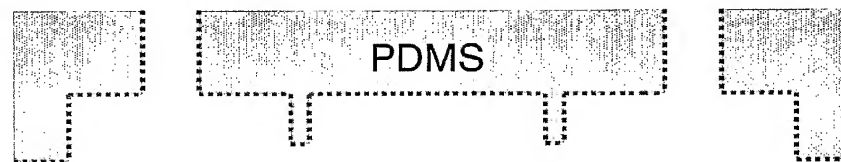
(b)



(c)



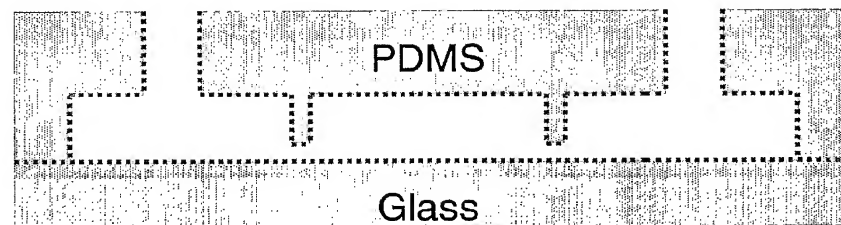
(d)



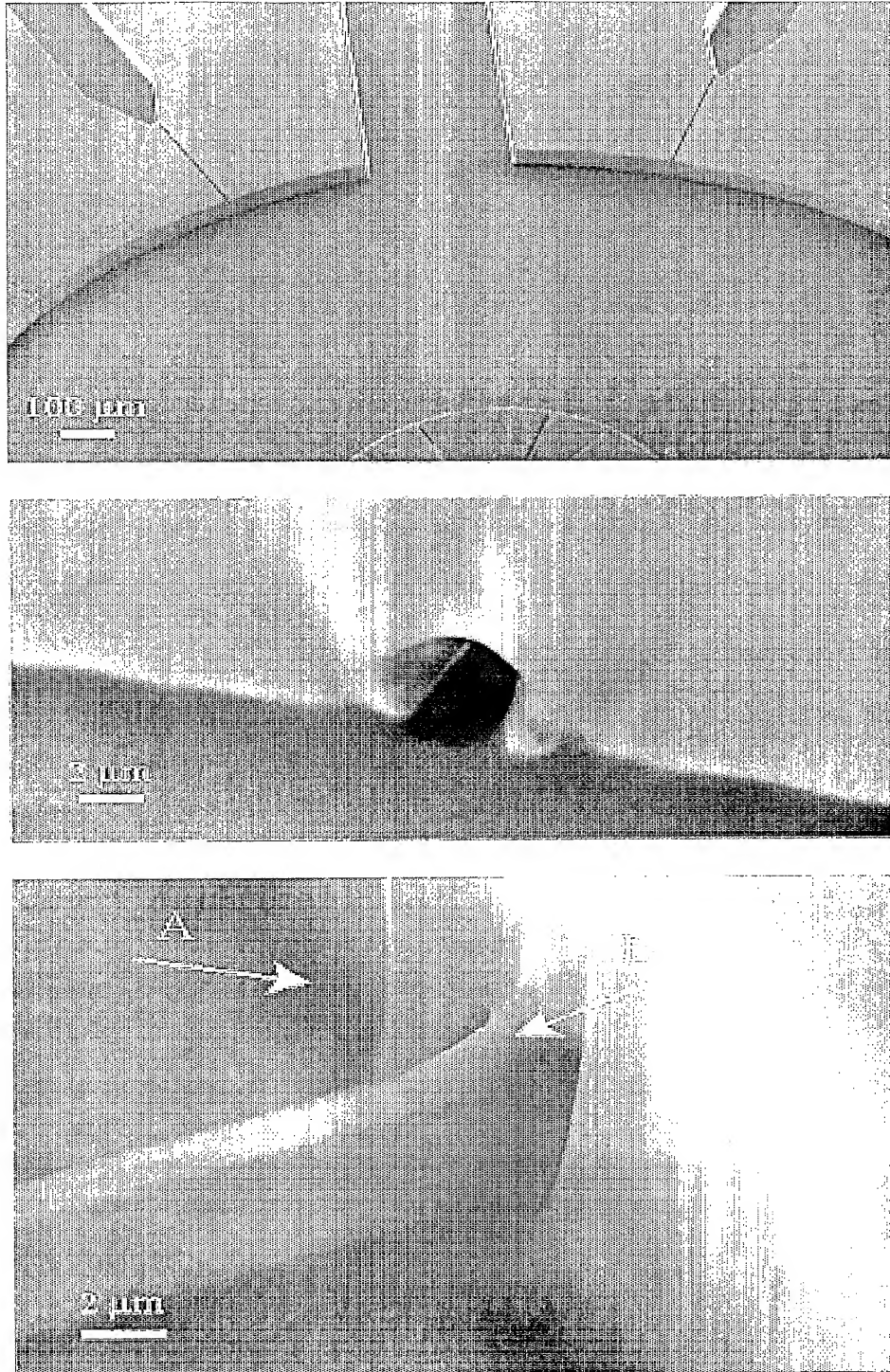
(e)



(f)

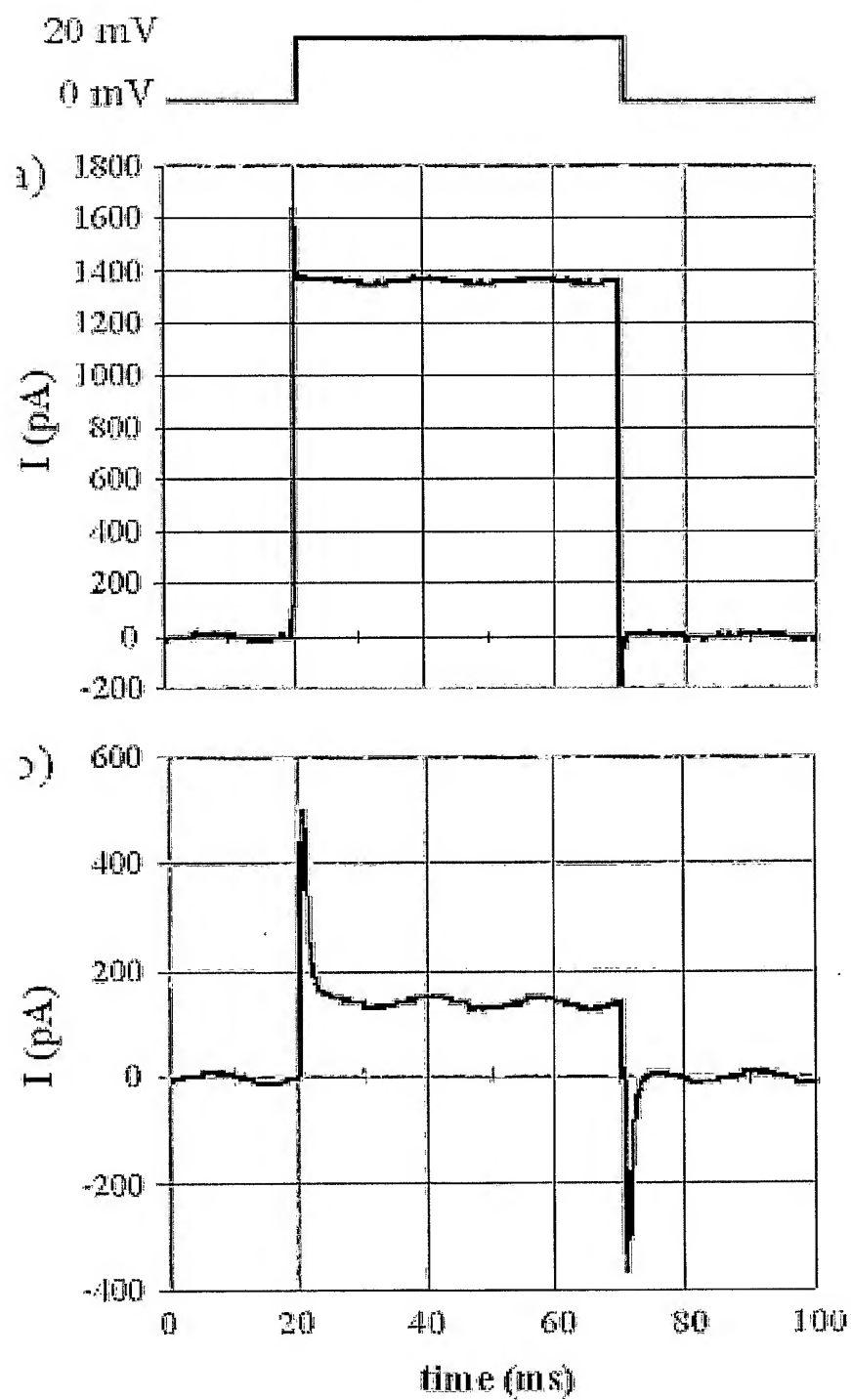
FIG. 10 A-F

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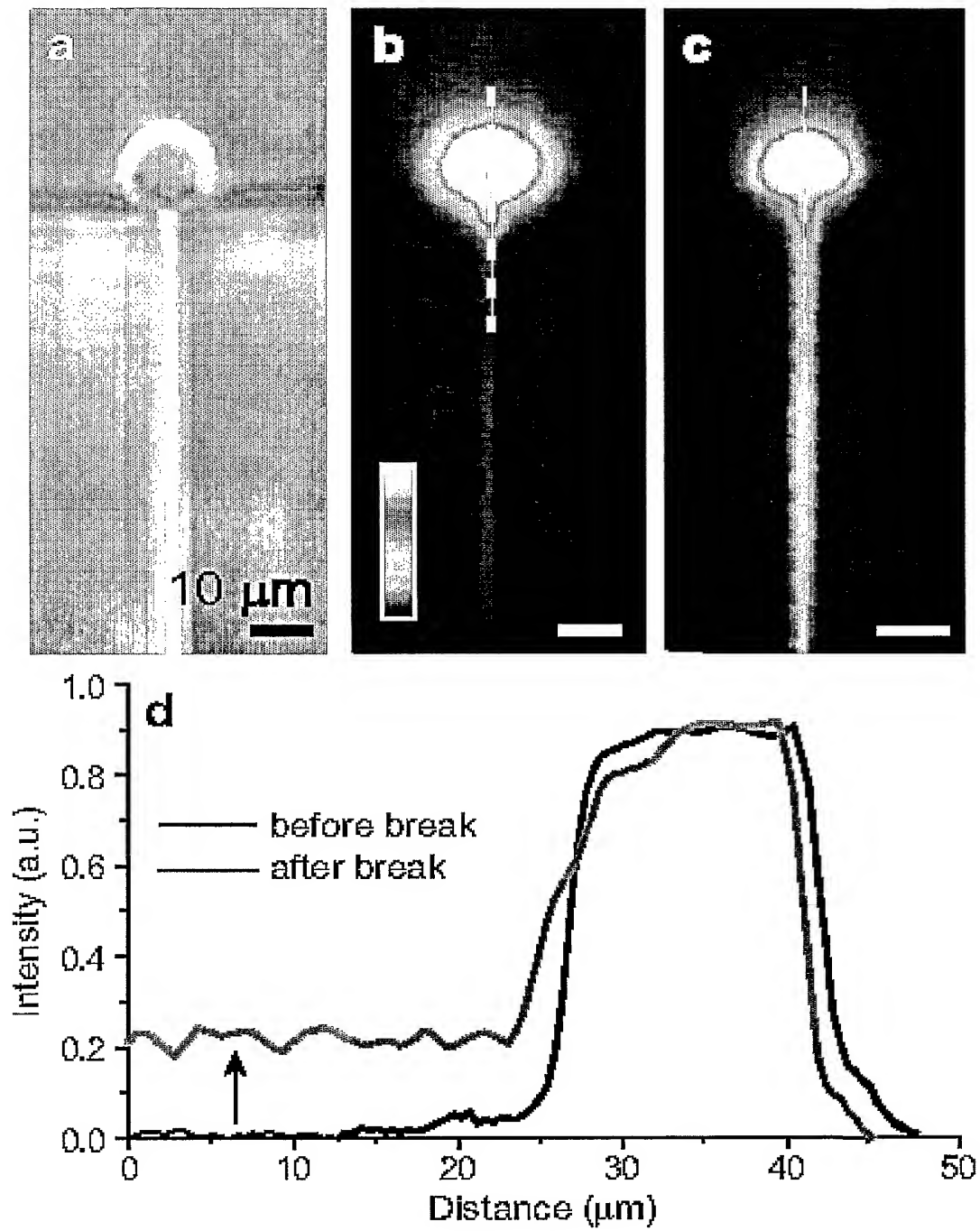


**FIG. 10 G&H&I**

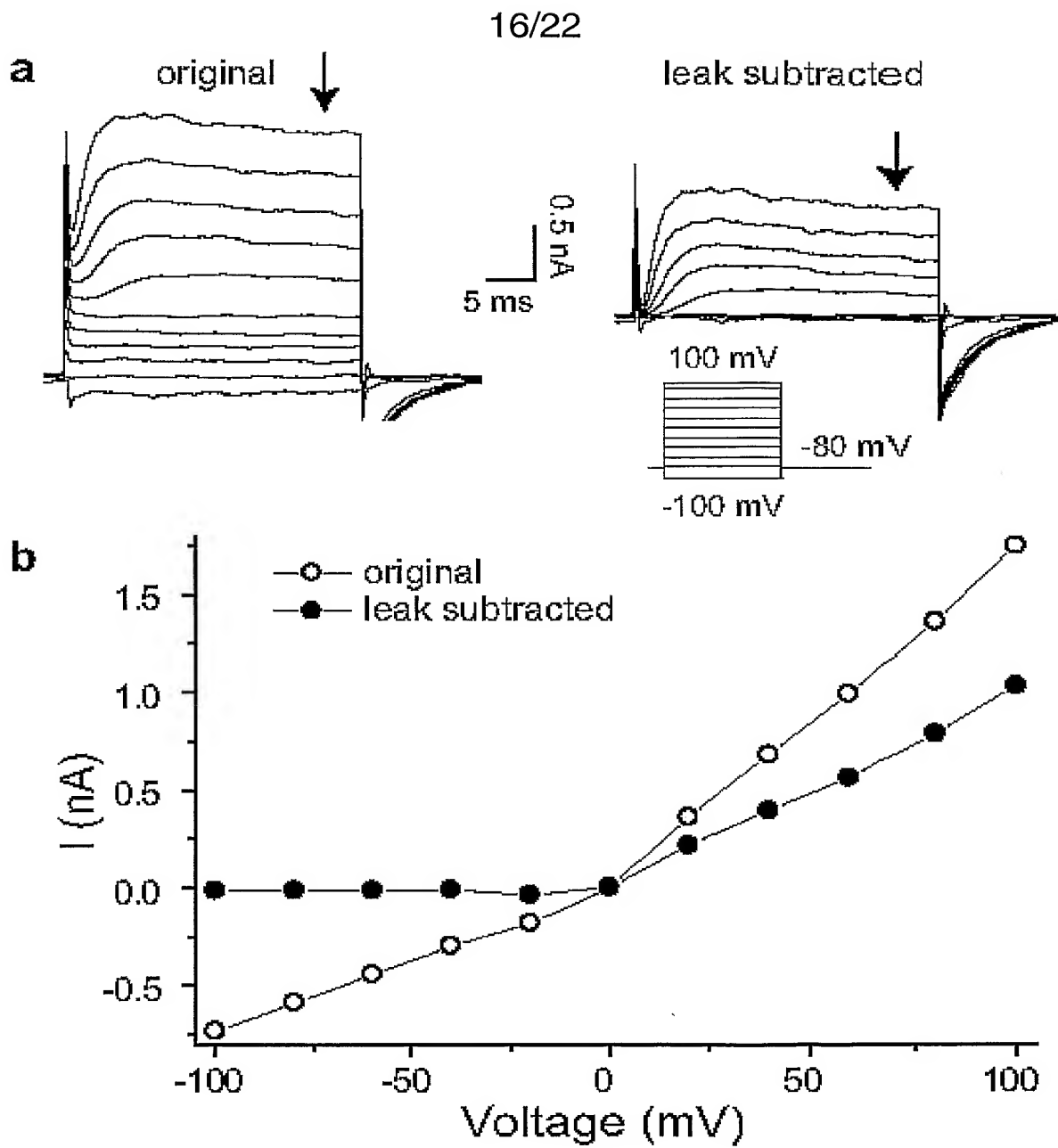
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**FIG. 11A&B**

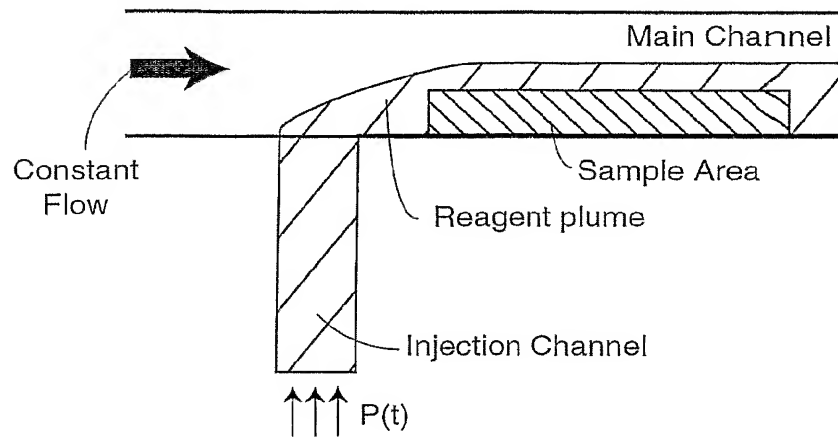
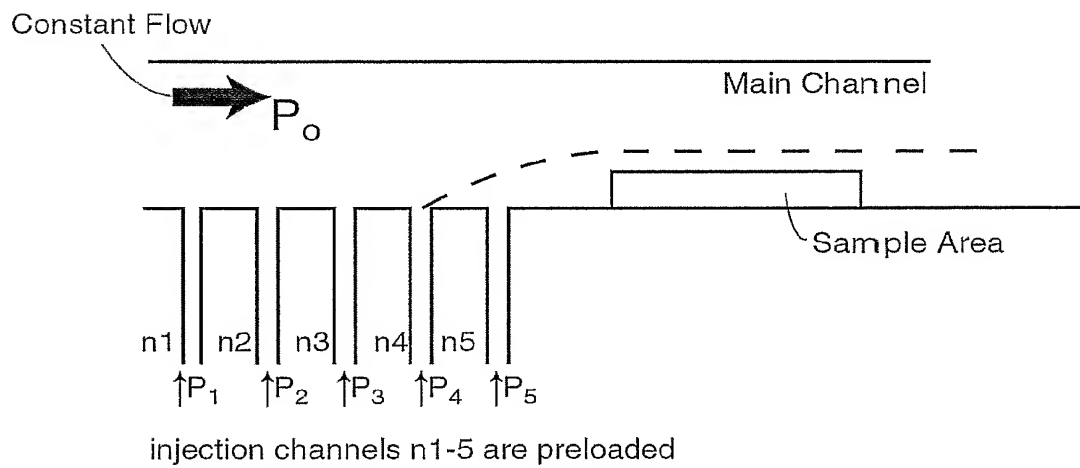
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**FIG. 12**

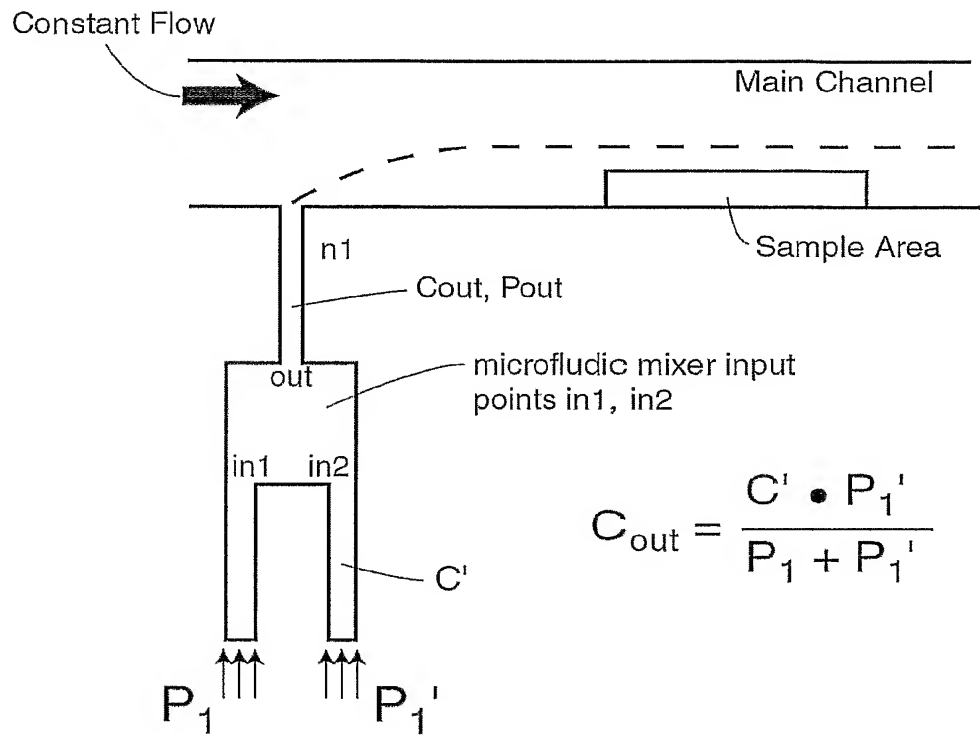
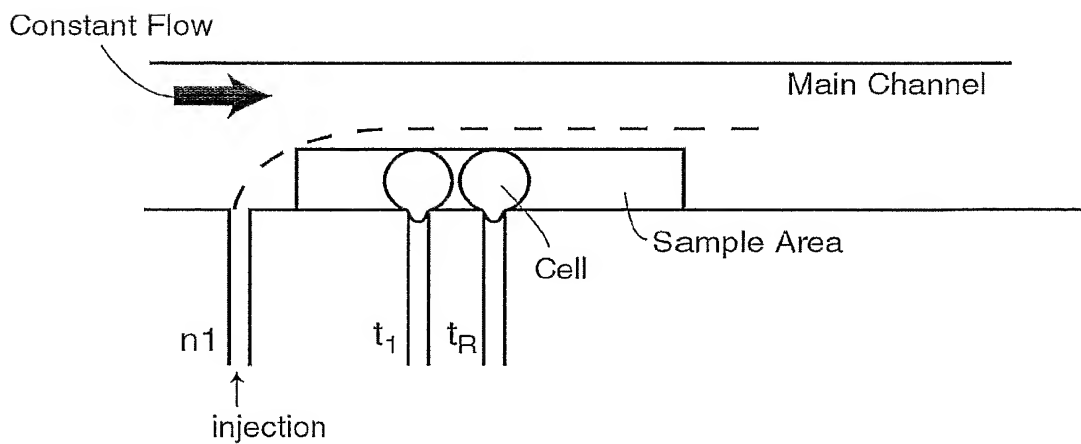


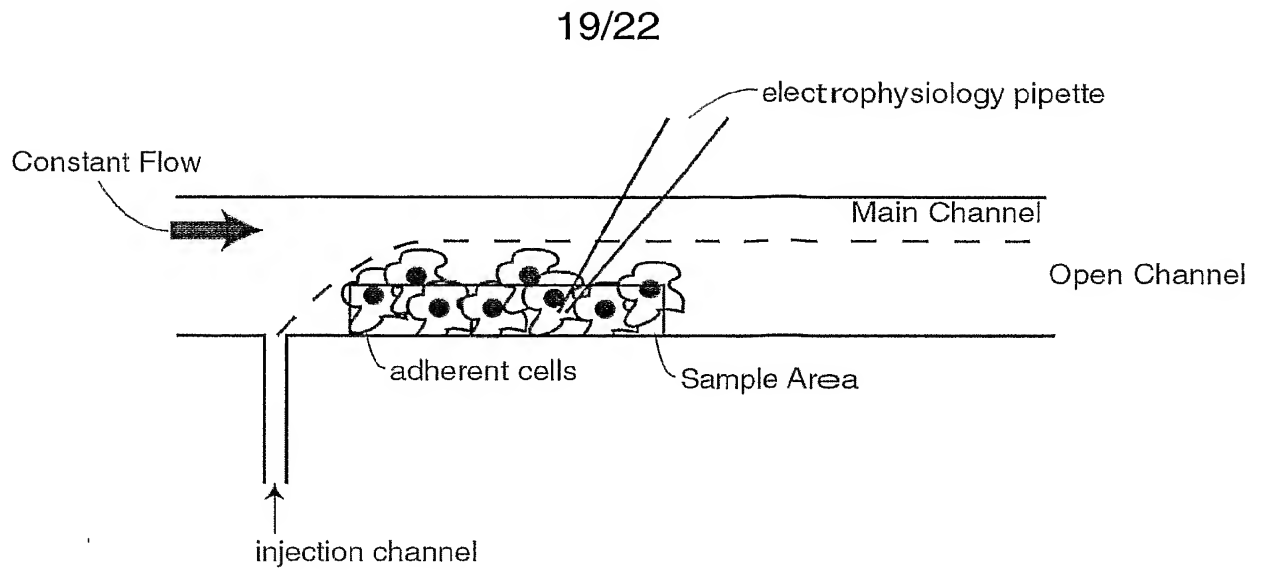
**FIG. 13**

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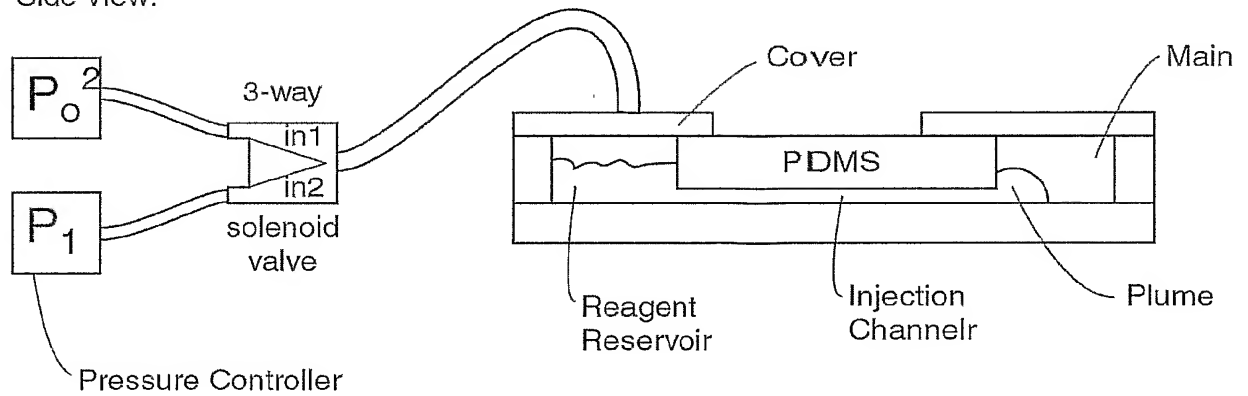
**FIG. 14****FIG. 15**

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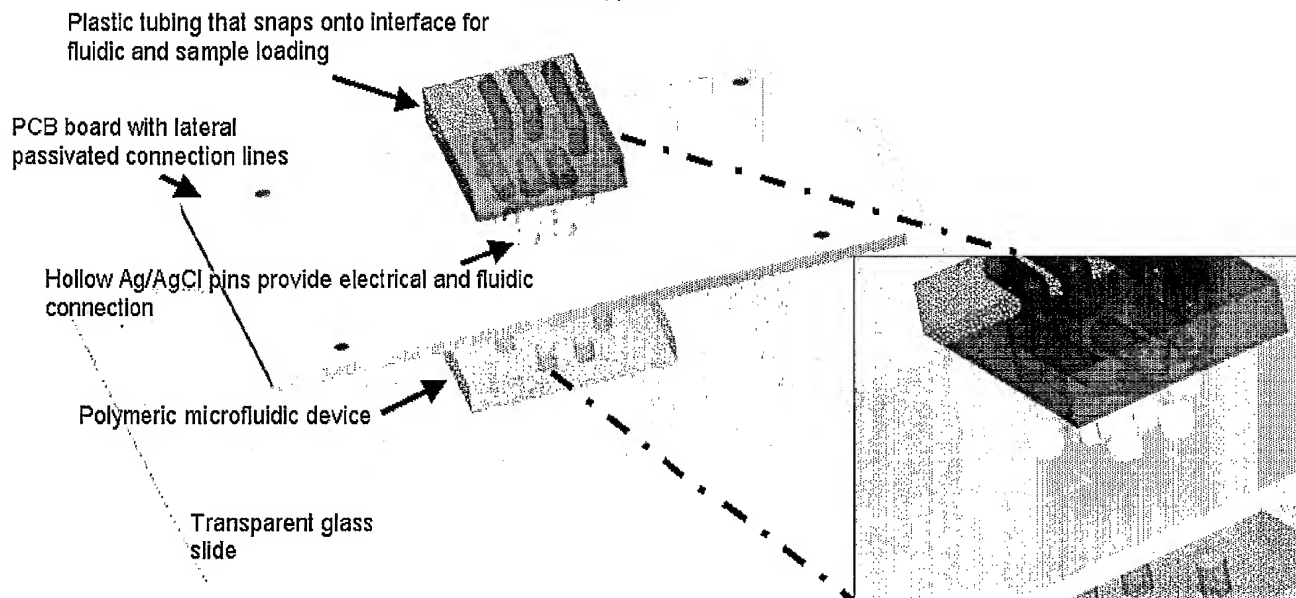
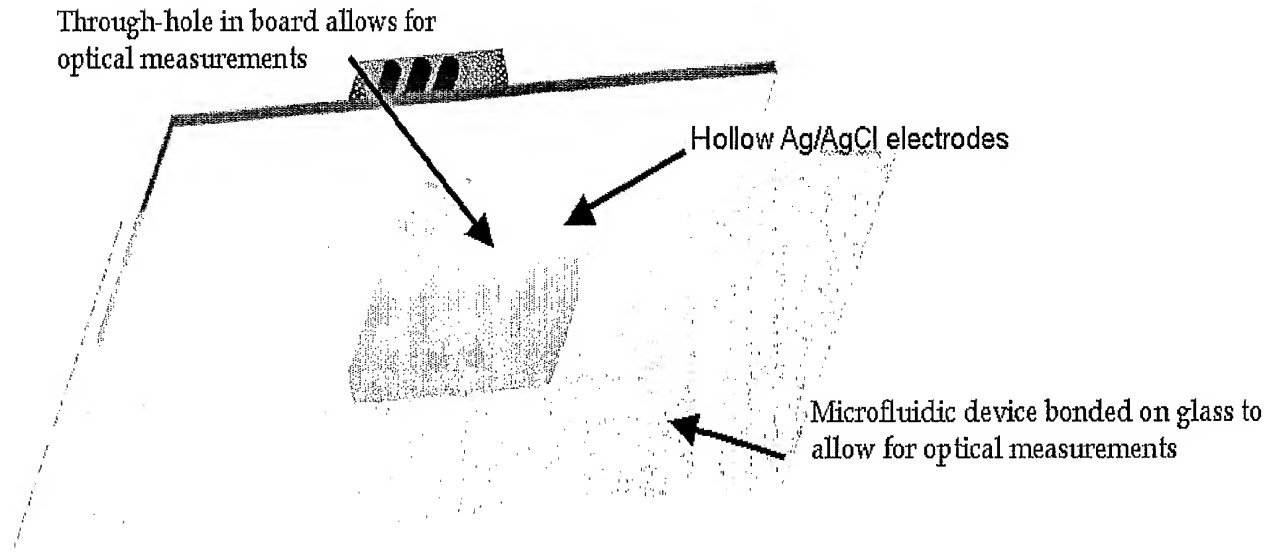
**FIG. 16****FIG. 17**

**FIG. 18**

Side View:

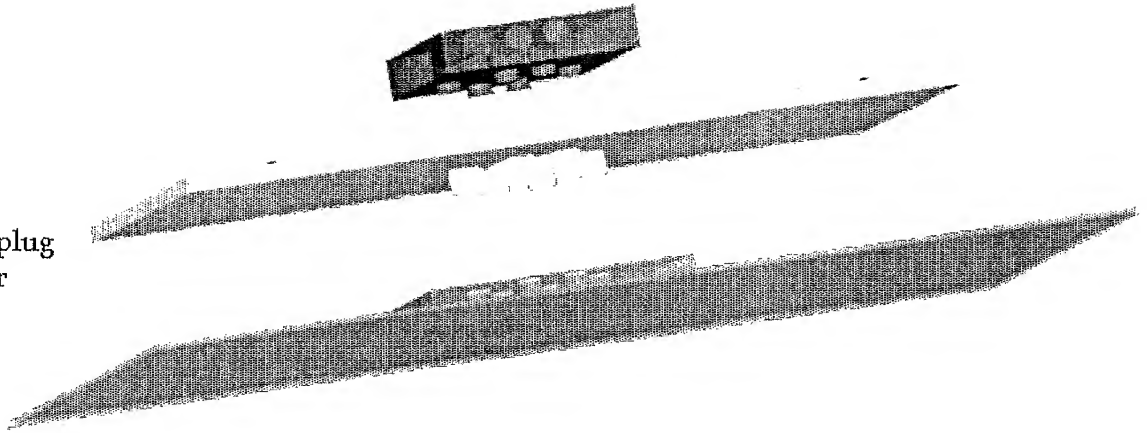
**FIG. 19**

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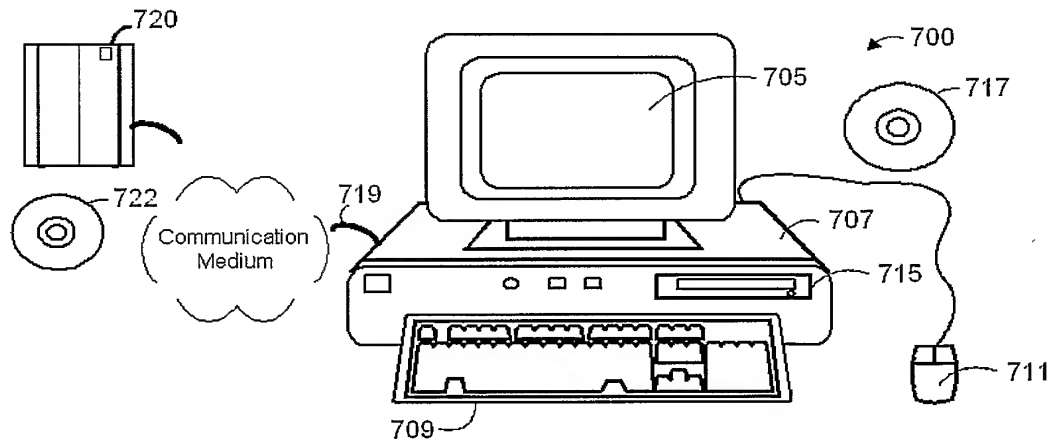
***FIG. 20******FIG. 21***

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All the pieces plug  
into each other



**FIG. 22**



**FIG. 23**

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<i><u>Disease Classification</u></i>	<i><u>Disease</u></i>
<u>Cardiovascular Disease</u>	Atherosclerosis; Unstable angina; Myocardial Infarction; Restenosis after angioplasty or other percutaneous intervention; Congestive Heart Failure; Myocarditis; Endocarditis; Endothelial Dysfunction; Cardiomyopathy
<u>Endocrine Disease</u>	Diabetes Mellitus I and II; Thyroiditis; Addison's Disease
<u>Infectious Disease</u>	Hepatitis A, B, C, D, E; Malaria; Tuberculosis; HIV; Pneumocystis Carinii; Giardia; Toxoplasmosis; Lyme Disease; Rocky Mountain Spotted Fever; Cytomegalovirus; Epstein Barr Virus; Herpes Simplex Virus; Clostridium Difcile Colitis; Meningitis (all organisms); Pneumonia (all organisms); Urinary Tract Infection (all organisms); Infectious Diarrhea (all organisms)
<u>Angiogenesis</u>	Pathologic angiogenesis; Physiologic angiogenesis; Treatment induced angiogenesis
<u>Inflammatory/Rheumatic Disease</u>	Rheumatoid Arthritis; Systemic Lupus Erythematosus; Sjogrens Disease; CREST syndrome; Scleroderma; Ankylosing Spondylitis; Crohn's; Ulcerative Colitis; Primary Sclerosing Cholangitis; Appendicitis; Diverticulitis; Primary Biliary Sclerosis; Wegener's Granulomatosis; Polyarteritis nodosa; Whipple's Disease; Psoriasis; Microscopic Polyangniitis; Takayasu's Disease; Kawasaki's Disease; Autoimmune hepatitis; Asthma; Churg-Strauss Disease; Beurger's Disease; Raynaud's Disease; Cholecystitis; Sarcoidosis; Asbestosis; Pneumoconioses
<u>Transplant Rejection</u>	Heart; Lung; Liver; Pancreas; Bowel; Bone Marrow; Stem Cell; Graft versus host disease; Transplant vasculopathy
<u>Leukemia and Lymphoma</u>	

**FIG. 24. (TABLE 1)**